UNDERSTANDING THE SPREAD OF DISEASES IN THE ABDOMEN

Think Of Diseases as an Invading Army

God does not play dice with the Universe

A. Einstein

SPREAD OF INTRAPERITONEAL PROCESSES

- Origin and nature of process
- Ligaments and recesses
- Anatomic variants
- Gravity
- Time
- Position of patient
- Intraperitoneal pressure gradients
- Iatrogenic factors
THE PERITONEAL SPACES

- SUPRAMESOCOLIC
  RIGHT SUBPHRENIC
  ANTERIOR
  POSTERIOR
  RIGHT SUBHEPATIC
  ANTERIOR
  POSTERIOR
  LEFT SUBHEPATIC
  LESSER SAC

- INFRAMESOCOLIC
  pelvic
  paracolic
  right
  left
  infracolic
  right
  left
  mesenteric
THE PERITONEAL SPACES

- SUPRAMESOCOLIC
  - RIGHT SUBPHRENIC
  - ANTERIOR
  - POSTERIOR
- INFRAMESOCOLIC
  - PELVIC
  - PARACOLIC
  - RIGHT
  - LEFT
  - INFRACOLIC
  - RIGHT
  - LEFT
  - MESENTERIC

The Bare Area of the Liver

Peritoneal Lymphomatosis

Carcinoid
THE PERITONEAL SPACES

- **SUPRAMESOCOLIC**
  - Right subphrenic
  - Anterior
  - Posterior
  - Right subhepatic
  - Anterior
  - Posterior
  - Left subhepatic
  - Lesser sac

- **INFRAMESOCOLIC**
  - Pelvic
  - Paracolic
  - Right
  - Left
  - Infracolic
  - Right
  - Left
  - Mesenteric

Carcinoma of the Ovary: Morison’s Pouch

Contrast in bowel can mask a calcified lesion

THE PERITONEAL SPACES

- **SUPRAMESOCOLIC**
  - Right subphrenic
  - Anterior
  - Posterior
  - Right subhepatic
  - Anterior
  - Posterior
  - Left subhepatic
  - Lesser sac

- **INFRAMESOCOLIC**
  - Pelvic
  - Paracolic
  - Right
  - Left
  - Infracolic
  - Right
  - Left
Carcinoid: Left Paracolic Gutter

Ileocecal Fossa

Falciform Ligament

Calcified Ovarian Metastases In Falciform Ligament
Where to Look

Important Sites of Disease Deposition

- Pouch of Douglas
- Blumer’s Shelf
- Lesser Sac
- Abscess in Lesser Sac
Carcinoma of the Ovary: Phrenicocolic Ligament

The Extraperitoneal Spaces

LATERAL (PERIPHERAL) SUBPERITONEAL PATHWAY

- Anterior + Posterior Pararenal Spaces
- Perirenal Spaces
- Infraconal Spaces
- Paravesical Spaces
CENTRAL SUBPERITONEAL PATHWAY

- Follows Inferior Mesenteric Artery and its Branches:
  - Left Colic
  - Sigmoid
  - Superior Hemorrhoidal
- To Aorta at L3
- May extend to SMA/Celiac and Mesenteries

BLEEDING INTO SIGMOID MESOCOLON

- Images showing bleeding into the sigmoid mesocolon.
HOW TO UNDERSTAND THE DIFFICULT CASE

MOTORCYCLE ACCIDENT PATIENT IN COMA

LARGE THIGH ABSCESS
Take Home

- Think of the abdomen as a series of conduits and barriers
- Pay special attention to target areas where diseases are likely to hide
- Know behavior of different diseases
- Always think anatomically!